Appendix I – Odor Management Plan Post-Closure Land Use Plan Former Santa Clara All-Purpose Landfill City Place Santa Clara 5500 Lafayette Street Santa Clara, California

APPENDIX I

ODOR MANAGEMENT PLAN

As waste is exposed to air during excavation, waste degradation processes will transition from anaerobic to aerobic processes. Aerobic degradation processes often produce decomposition gases characterized by an unpleasant odor. In order to prevent onsite or offsite odor problems, an odor management plan has been developed for the Site. The following sections describe odor control techniques that may be implemented during construction at the City Place Santa Clara development.

The primary odor control measure to be implemented at the Site will be the use of interim cover measures over exposed waste. The placement of cover soil or other appropriate cover, such as a geosynthetic blanket, over exposed waste reduces the odors in the waste excavation areas. Interim covers will be placed at the end of each work day and as areas reach final grade.

If, despite the use of cover, odors should become a problem on- or offsite, the source will be determined and additional steps will be taken to control the odors. These additional steps may include biofiltration, the use of an air circulating system, and, if necessary, the use of odor masking agents and chemical odor suppressants.

Biofiltration involves the application of additional cover material, such as peat moss or compost over the exposed waste during operations. The biofiltration medium acts as an adsorbent and provides a surface for biological mass to convert odors into non-odorous substances.

Circulating the air at the landfill will dilute the intensity of the odors. An air circulation system could, for example, blow fresh air from around the landfill into the odorous area, mix the fresh air with the pungent air, and then propel the mixed air into the atmosphere, above the atmospheric layer that holds odors close to the ground. The sun then oxidizes the odor molecules and breaks them down into odorless molecular forms.

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Odor masking agents and chemical odor suppressants may be used. Masking agents will overpower the malodors with more pleasant ones without chemical reaction. Chemical odor suppressants contain or overpower the malodors by altering their molecular structures.

